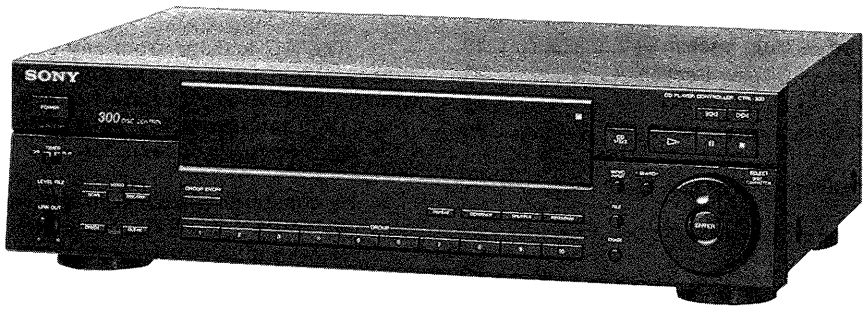
CTRL-300

SERVICE MANUAL

US Model



SPECIFICATIONS

Frequency response	2 Hz to 20 kHz ± 0.3 dB
Signal-to-noise ratio	More than 100 dB
Harmonic distortion	Less than 0.005%
Channel separation	More than 90dB

Outputs

	Jack type	Maximum output level	Load impedance
LINE OUT VARIABLE	Phono jacks	2 V (at 50 kilohms)	Over 10 kilohms

General

Power requirement	120 V AC, 60 Hz
Power consumption	10 W
Dimensions (approx.) (w/h/d)	430 × 125 × 295 mm (17 × 5 × 11 5/8 in.) incl. projecting parts
Mass (approx.)	3 kg (6 lbs 10 oz)

Supplied accessories

Audio cord (2 phono plugs – 2 phono plugs) (1)
Remote commander (remote) (1)
System cords (Mini plug – Mini plug) (3)
Sony SUM-3 (NS) batteries (2)

Design and specifications are subject to change without notice.

CD PLAYER CONTROLLER

SONY®

TABLE OF CONTENTS

Section	Title	Page
SECTION 1.	GENERAL	3
SECTION 2.	DIAGRAMS	
2-1.	Circuit Boards Location	11
2-2.	Block Diagram	12
2-3.	Schematic Diagram — Main Section —	15
2-4.	Printed Wiring Board — Main Section —	19
2-5.	Printed Wiring Board — Display Section —	23
2-6.	Schematic Diagram — Display Section —	27
2-7.	Semiconductor Lead Layouts	30
2-8.	IC Pin Function	
	• IC301 Micro Computer (CXP-84124-TCA994)	31
SECTION 3.	EXPLODED VIEWS	
3-1.	Case Section	33
3-2.	Front Panel Section	34
SECTION 4.	ELECTRICAL PARTS LIST	35

Flexible Circuit Board Repairing

- Keep the temperature of the soldering iron around 270 °C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety checks before releasing the set to the customer:
Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

LEAKAGE

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microampers). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.

2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.

3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2V AC range are suitable. (See Fig. A)

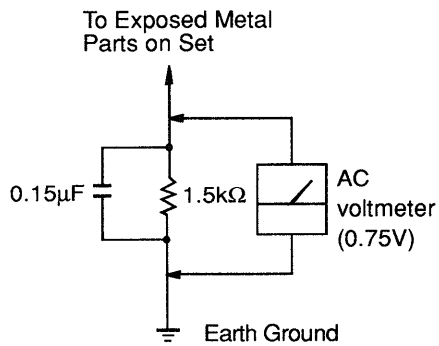
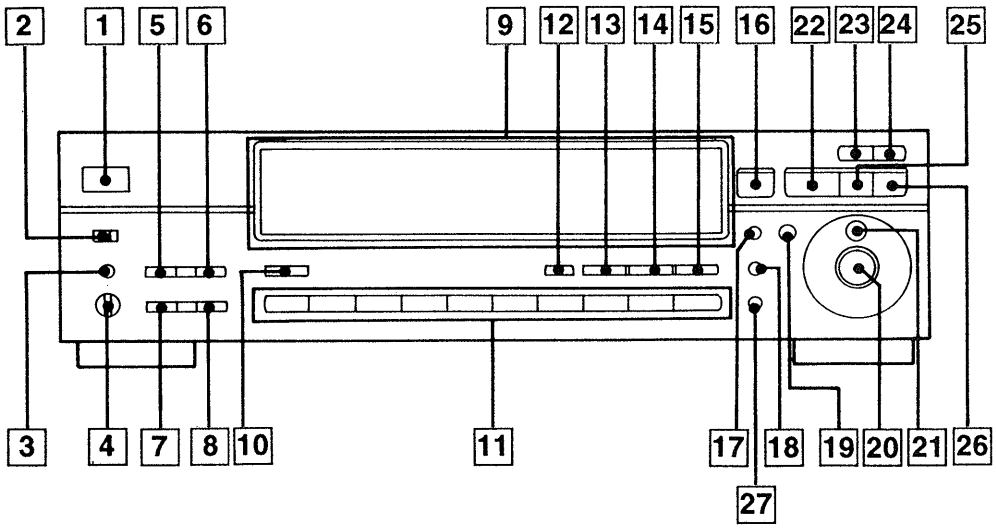


Fig. A. Using an AC voltmeter to check AC leakage.

SECTION 1
GENERAL

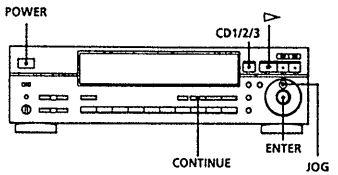
LOCATIONS OF CONTROL



1 POWER switch
2 TIMER switch (OFF/PLAY)
3 LEVEL FILE button
4 LINE OUT control
5 MEMO SCAN button
6 MEMO DISC/GRP. button
7 CHECK button
8 CLEAR button
9 DISPLAY
10 GROUP ENTRY button
11 GROUP 1 – 10 button
12 REPEAT button
13 CONTINUE button
14 SHUFFLE button
15 PROGRAM button
16 CD 1/2/3 button
17 MEMO INPUT button
18 FILE button
19 MEMO SEARCH button
20 ENTER button
21 JOG dial
22 ▷ (PLAY) button
23 ⏮ button
24 ⏭ button
25 ■ button
26 ⏸ button
27 ERASE button

Playing CDs

You can play all the tracks on a disc in the original order (Continuous Play). You can also play up to 300 discs consecutively if you have connected three players to the controller.
Before you begin, make sure you have connected the players to the controller and the controller to an amplifier correctly and firmly as indicated on pages 4 to 6.



1 Turn on the amplifier and select the CD player position.

2 Press POWER to turn on the controller.
The players connected also turn on, and "REMOTE ON" appears in their displays.

When the players do not turn on
Press POWER on the players.

3 Press CONTINUE to select CHAIN, ONE PLAYER or ONE DISC Continuous Play mode.
Each time you press CONTINUE, "CHAIN," "ONE PLAYER" or "ONE DISC" appears in the display.

When you select	The controller plays
CHAIN	All discs in all players consecutively in the following order: 1st disc in CD1 → 1st disc in CD2 → 1st disc in CD3 → 2nd disc in CD1 → 2nd disc in CD2 → 2nd disc in CD3 → ... Empty disc slits are skipped.
ONE PLAYER	All discs in the current player consecutively in the order of disc number. Empty disc slits are skipped.
ONE DISC	Only one disc you have selected in the current player.

4 When you want to specify the player (the first playing player for the CHAIN Continuous Play), press CD1/2/3 repeatedly until the player number you want appears in the display.

5 When you want to specify the first playing disc, turn the JOG dial until the disc number you want appears in the display.

To use the JOG dial on the remote
Be sure that the JOG ON/OFF indicator lights red. If not, press JOG ON/OFF once before using the JOG dial.

6 Press ▷ or ENTER to start play.
Adjust the volume on the amplifier.

If you select the first playing disc for the CHAIN Continuous Play at step 5
After the selected disc is played, the other discs will be played in numerical order of player number and disc number.
Example:
4th disc in CD2 (specified as the first playing disc) → 1st disc in CD3 → 1st disc in CD1 → 1st disc in CD2 → 2nd disc in CD3 → 2nd disc in CD1 → ...

To stop playback
Press ■.

When you want to	Press
Pause	II
Resume play after pause	II or ▷
Go to the next disc	DISC SKIP + once. Hold down the button to skip discs.
Go back to the preceding disc	DISC SKIP − once. Hold down the button to skip discs.
Go to the next track	▷▷I
Go back to the preceding track	I◁◁

When you turn off the controller
The controller remembers the last playing player and disc as well as the play mode (Continuous, Shuffle (see page 12) or Program (see page 13)). When you turn on the controller again, therefore, the same player plays the same disc in the same play mode.

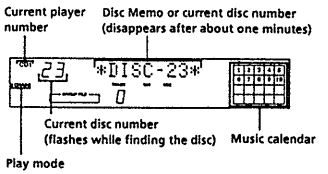
Note
- You cannot operate the players connected to the controller using the controls on the players. (When the players are to be controlled by the controller, "REMOTE" lights up in each player's display.)

Using the Display

You can check information about the disc using the display on the controller.

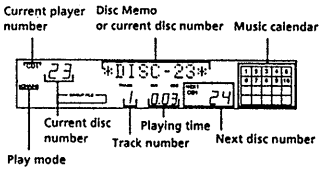
Display information before playing

Before you start playing, the display shows the following:



Display information while playing

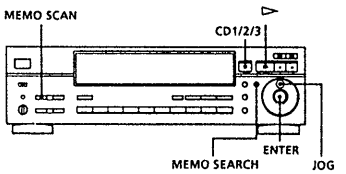
While playing a disc, the display shows the following:

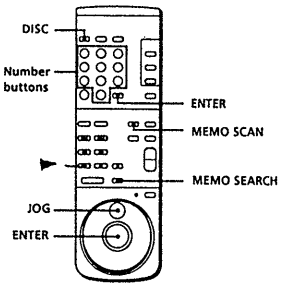


The track numbers in the music calendar disappear after they are played.

Locating a Specific Disc

You can specify a disc to start play with in Continuous Play mode.





Selecting a disc with the controller

1 Press CD1/2/3 repeatedly until the player number you want (CD1, 2 or 3) lights up in the display.

2 Turn the JOG dial until the disc number you want appears in the display.

To use the JOG dial on the remote
Be sure that the JOG ON/OFF indicator lights red. If not, press JOG ON/OFF once before using the JOG dial.

3 Press ENTER or ▷ to start play.

Selecting a disc directly with the remote

1 Press DISC on the remote.
By pressing DISC repeatedly, you can also changes the player number.

2 Press the number button of the disc.

To select a disc with a number over 10
Press the 10's digit first, then the 1's digit. To enter 0, use the button 10/0.
Example:
To enter number 30, press 3, then 0 (10/0).
To enter number 100, press 0 (10/0) twice.

3 Press ENTER to start play.

This section is extracted from instruction manual.

Locating a disc by scanning each Disc Memo (Memo Scan)

You can locate a disc you want to play quickly by scanning the Disc Memos (see page 16) in the display and start playing.
Note that you cannot use this function in the CHAIN Shuffle and ONE PLAYER Shuffle, and Program Play modes.

1 Press MEMO SCAN until "MEMO SCAN" appears in the display.
The Disc Memos scroll in the display.

2 Press ENTER or ▷ when the Disc Memo of the disc you want to play appears.
The disc is set to the playing position, and the controller starts playing.

You can jump to the next or preceding Disc Memo while scanning
Press I◁◁ or ▷▷I.

Note
If "–NO ENTRY–" appears in the display, no disc has been labeled using the Disc Memo function (see page 16). Try the Memo Scan function again after labeling the discs.

Locating a disc by searching a specific Disc Memo (Memo Search)

You can search and locate a disc you want by inputting 1 to 3 characters used in the Disc Memo of the disc.

1 Press MEMO SEARCH so that the indicator next to it lights red.
The character entry display "SEARCH-_" appears.

2 Turn the JOG dial to input the first character.
When you turn the JOG dial clockwise, the characters appear in the following order. Turn the JOG dial counterclockwise to go back to the previous character.

(space) A B C D E F G H I J K L M N O P Q R S T U V W X Y Z & ä ö ü ; : ( ) [ ] % $ # 0 1 2 3 4 5 6 7 8 9 10→ ← ' / ! ? ' " , -

Notes
- When searching input characters, blanks before the first character in the Disc Memo are ignored.
- When searching input characters, upper and lower case cannot de differentiated.

To use the JOG dial on the remote
Be sure that the JOG ON/OFF indicator lights red. If not, press JOG ON/OFF once. (When you press MEMO SEARCH on the remote, the JOG ON/OFF indicator automatically lights red.)

To input the second (and third) character
Press ▷▷I to move the character entry position to the right and turn the JOG dial.
If you press I◁◁, the character entry position moves to the left.

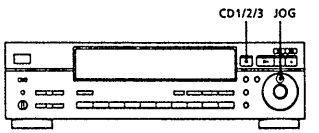
3 Press ENTER to start searching.
If Disc Memos starting with the input character(s) are found, "FOUND" and the number of the Disc Memos found appear in the display. Then, turn the JOG dial to find the disc you want.
If "–NOT FOUND–" appears in the display, no disc has been labeled using the input character(s). The character entry display appears again.

To cancel Memo Search
Press MEMO SEARCH again so that the indicator turns off.
If you press other button, Memo Search is also canceled.

You can go back to the character entry display before canceling Memo Scan
Press I◁◁ or ▷▷I.

Specifying the Next Disc to Play

You can specify the next disc to play while playing a disc in the Continuous Play mode.



1 While playing a disc, press CD1/2/3 repeatedly until the player number you want (CD1, 2 or 3) lights up in the display.

2 Turn the JOG dial until the disc number you want appears in the display.

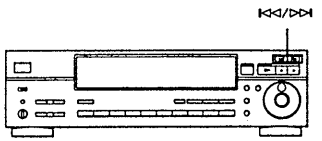
To use the JOG dial on the remote
Be sure that the JOG ON/OFF indicator lights red. If not, press JOG ON/OFF once before using the JOG dial.

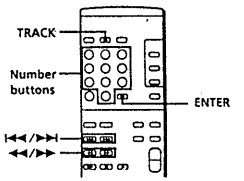
After the current disc is played, the next disc you have specified starts playing.
If you want to skip to the next disc right away, press ENTER while playing the current disc.

To cancel the disc you have specified
Press CONTINUE three times.

Locating a Specific Track or a Point in a Track

You can quickly locate any track while playing a disc using the I◁◁/▷▷I (AMS: Automatic Music Sensor) buttons or number buttons on the remote. You can also locate a specific point in a track while playing a disc.



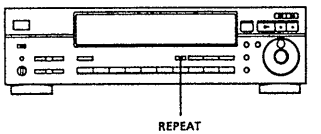


To locate	Press
The next or succeeding tracks	▷▷I repeatedly until you find the track.
The current or preceding tracks	I◁◁ repeatedly until you find the track.
A specific track directly	1 Press TRACK. 2 Press the number button of the track. 3 Press ENTER.
A point in a track while monitoring the sound	▶▶ (forward) or ◀◀ (backward) and hold down until you find the point.
A point in a track quickly by observing the display during pause	◀◀/▶▶ and hold down until you find the point. You will not hear the sound during the operation.

When you directly locate a track with a number over 10
Press the 10's digit first, then the 1's digit. To enter 0, use the button 10/0.

Playing Repeatedly (Repeat Play)

You can play discs/tracks repeatedly in any play mode. Play stops after repeating the tracks five times in each play mode.



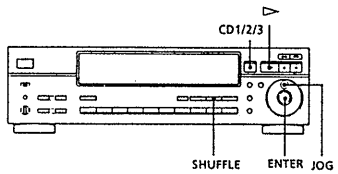
Press REPEAT while playing a disc.
"REPEAT" appears in the display. The controller repeats the discs/tracks as follows:

When the disc is played in	The controller repeats
CHAIN Continuous Play (page 8)	All tracks on all discs in all players.
ONE PLAYER Continuous Play (page 8)	All tracks on all discs in the current player.
ONE DISC Continuous Play (page 8)	All tracks on the current disc in the current player.
CHAIN Shuffle Play (page 12)	All tracks on all discs in all players at random.
ONE PLAYER Shuffle Play (page 12)	All tracks on all discs in current player at random.
ONE DISC Shuffle Play (page 12)	All tracks on the current disc in the current player at random.
Program Play (page 13)	The same program.

To cancel Repeat Play
Press REPEAT again. "REPEAT OFF" appears for a while, and "REPEAT" disappears from the display.

Playing in a Random Order (Shuffle Play)

You can have the controller "shuffle" the tracks and play in a random order. The controller shuffles all the tracks on all discs in all players (CHAIN Shuffle Play), all the tracks on all discs in a particular player (ONE PLAYER Shuffle Play), or on the disc you specified (ONE DISC Shuffle Play).



1 Press SHUFFLE to select CHAIN, ONE PLAYER, or ONE DISC Shuffle Play mode.
Each time you press CONTINUE, "CHAIN," "ONE PLAYER" or "ONE DISC" appears in the display.

When you select	The controller plays
CHAIN	All tracks on all discs in all players selected at random. However, the controller changes the players in the numerical order each time a track is played — that is to say, if the first track is selected from the CD2, the next track is selected from the CD3. Empty disc slits are skipped.
ONE PLAYER	All tracks on all discs in the current player at random. Empty disc slits are skipped.
ONE DISC	All tracks on a specified disc at random.

2 When you want to specify the player (the first playing player for the CHAIN Shuffle Play), press CD1/2/3 repeatedly until the player number you want appears in the display.

3 When you want to specify the disc for ONE DISC Shuffle Play, turn the JOG dial until the disc number you want appears in the display.

To use the JOG dial on the remote
Be sure that the JOG ON/OFF indicator lights red. If not, press JOG ON/OFF once before using the JOG dial.

4 Press ENTER or ▷.
~~CHAIN~~ Shuffle Play starts.
"[ ]," appears in the display while the controller "shuffling" the discs or tracks.

To cancel Shuffle Play
Press CONTINUE.

You can start Shuffle Play while playing
Press SHUFFLE, and Shuffle Play starts from the current track.

You can directly select a disc for ONE DISC Shuffle Play
See "Selecting a disc directly with the remote" on page 9.

You can change the playing disc during ONE DISC Shuffle Play
To move to the preceding disc, press DISC SKIP –.
To move to the next disc, press DISC SKIP +.

You can specify the next disc to play during ONE DISC Shuffle Play
1 Press CD1/2/3 repeatedly until the player number you want (CD1, 2 or 3) lights up at the right side of the display.
"NEXT" also starts flashing.
2 Turn the JOG dial to specify the next disc.
When using the JOG dial on the remote, be sure that the JOG ON/OFF indicator lights red. If not, press JOG ON/OFF once before using the JOG dial.
After all the tracks on the current disc are played at random, the next disc starts playing.
If you want to skip to the next disc right away, press ENTER while playing the current disc.

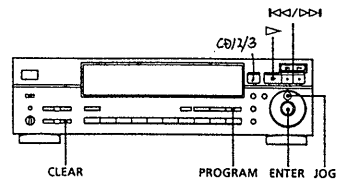
You can specify the next player to play during CHAIN and ONE PLAYER Shuffle Play
Press CD1/2/3 repeatedly until the player number you want (CD1, 2 or 3) lights up at the right side of the display. The next track to play will be selected from the specified player.

Note
- Even if you press ■ or turn off the controller during CHAIN or ONE PLAYER Shuffle Play, the controller remembers which discs/tracks are played and which are not. Therefore, if you want to start CHAIN or ONE PLAYER Shuffle Play again from the beginning, be sure to repeat the procedure from Step 1.

Creating Your Own Programs (Program Play)

You can arrange the order of the tracks and/or discs and create 3 different programs and programs are stored automatically. A program can contain up to 32 "steps" — one "step" may contain a track or a whole disc.
You can make programs using either the JOG dial or the number buttons. However, the programming procedures are different.

Creating a program using the JOG dial

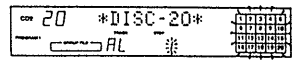


1 Press PROGRAM until the program number you want (PROGRAM 1, 2 or 3) appears in the display.
If a program is already stored in the selected program number, the last step of the program appears in the display. When you want to erase the whole program, hold down CLEAR until "ALL CLEAR" appears in the display (see page 15).

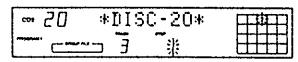
2 Press CD1/2/3 repeatedly to select the player.

3 Turn the JOG dial to select the disc.

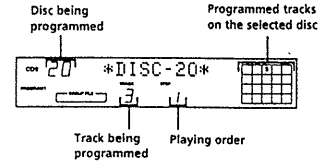
To use the JOG dial on the remote
Be sure that the JOG ON/OFF indicator lights red. If not, press JOG ON/OFF once before using the JOG dial.



4 To program a whole disc, skip this step. Press ⏮/⏭ to select a track



5 Press ENTER or PROGRAM.



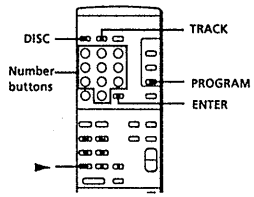
6 To program other discs/tracks, do the following:

To program	Repeat Steps
Other discs in the same player	3 and 5.
Other discs in other players	2, 3 and 5.
Other tracks on the same disc	4 to 5.
Other tracks on other discs in the same player	3 to 5.
Other tracks on other discs in other players	2 to 5.

7 Press ▷ to start Program Play.

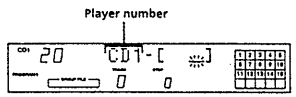
To cancel Program Play
Press CONTINUE.

Creating a program using the number buttons



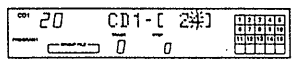
1 Press PROGRAM until the program number you want (PROGRAM 1, 2 or 3) appears in the display.
If a program is already stored in the selected program number, the last step of the program appears in the display. When you want to erase the whole program, hold down CLEAR until "ALL CLEAR" appears in the display (see page 15).

2 Press DISC repeatedly.
Each time you press DISC, the player number appearing in the display changes.

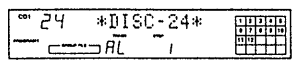


3 Press the number button of the disc.

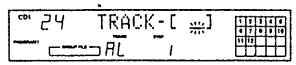
To select a disc with a number over 10
Press the 10's digit first, then the 1's digit. To enter 0, use the button 10/0 (see page 9).



4 Press ENTER.

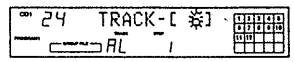


5 To program a whole disc, skip this step and go to Step 8. Press TRACK.

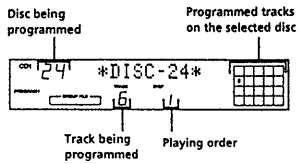


6 Press the number button of the track.

To select a track with a number over 10
Press the 10's digit first, then the 1's digit. To enter 0, use the button 10/0 (see page 9).



7 Press ENTER.



8 To program other discs/tracks, do the following:

To program	Repeat Steps
Other discs in the same player	2 to 4.
Other discs in other players	2 to 4.
Other tracks on the same disc	5 to 7.
Other tracks on other discs in the same player	2 to 7.
Other tracks on other discs in other players	2 to 7.

9 Press ► to start Program Play.

To cancel Program Play
Press CONTINUE.

The programs remain even after Program Play ends
When you press ►, you can play the same program again.
The programs are stored in the controller's memory for about a month with the power turned off.

When you press PROGRAM during Continuous or Shuffle Play
The last program you played appears and will be played after the current track.

The programs remain until you erase them
Even if you replace discs from the players, the programmed disc and track numbers remain in the controller's memory. So, the controller plays only the existing disc and track numbers. However, the disc and track numbers that are not found in the player or on the disc are deleted from the program, and the rest of the program is played in the programmed order.

Note
If "PROGRAM FULL" appears in the display, it means that you have already programmed 32 steps and cannot program any more steps.

Checking the programmed order

You can check your program before or after you start playing.

Press CHECK.
Each time you press this button, the display shows the track (the player, disc and track number) or disc number (the player, disc number and "AL" indication) of each step in the programmed order.
After the last track or disc in the program, the display shows "End" and returns to the original display. If you check the order after you start playing, the display shows only the remaining steps.

Changing the programmed order

You can change your program before you start playing.

To	You need to
Erase a step	Press CHECK until the step you do not want appears in the display, then press CLEAR.
Erase the last step in the program	Press CLEAR. Each time you press the button, the last step will be erased.
Add steps to the end of the program	Follow the programming procedure
Change the whole program completely	Hold down CLEAR until "ALL CLEAR" appears in the display to erase the whole program, then create a new program following the programming procedure.

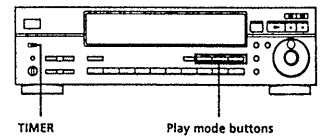
Erasing the programs stored in memory

1 Press PROGRAM repeatedly in the stop mode until the program number (PROGRAM 1, 2 or 3) you want to erase appears in the display.

2 Hold down CLEAR until "ALL CLEAR" appears in the display.

Playing Using a Timer

You can start playing a disc at any time you want by connecting a timer (not supplied). Please also refer to the instructions for the timer if you need help.



1 Press one of the play mode buttons to select the play mode you want.

2 Set TIMER on the controller to PLAY.

3 Set the timer to the time you want.
The controller turns off. When the set time comes, the controller and players turn on and start playing.

4 After you have used the timer, set TIMER on the controller to OFF.

Note
The setting of the TIMER switches on the connected players are invalid.

Storing Information About CDs (Custom Files)

What You Can Do With the Custom Files

The controller can store four types of information called "Custom Files" for each disc. Once you have stored Custom Files for a disc, the controller automatically recalls what you have stored whenever you select the disc. Note that Custom Files will be erased if you do not use the controller for about one month.

You can store this information:

When you use	You can
Disc Memo	Label the disc using up to 12 characters.
Delete Bank (page 17)	Delete unwanted tracks and store only the tracks you want.
Level File (page 18)	Store the optimum playback level of a disc.
Group File (page 19)	Group discs up to 10 groups to locate them easily.

Where are Custom Files stored?

Custom Files are stored not on the disc, but in the controller's memory. It means you cannot use Custom Files when you play the disc on other players. Also, since the controller stores Custom Files with each disc slit, so you cannot use Custom File when you insert a disc in another slit.

When you have replaced a disc in a slit

Custom Files remain even if you remove a disc. If you have replaced a disc with a new one, "DISC CHANGED" appears in the display whenever you try to play the new disc. Erase or change the Custom File information if necessary.

Erasing Custom Files

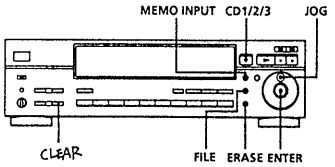
You can erase any unwanted Custom Files as follows:

To erase all Custom Files of one disc (1 DISC ERASE)
Turn the JOG dial to select the disc containing the Custom Files you want to erase. Hold down ERASE until "1 DISC ERASE" appears in the display, and all Custom Files of the disc will be erased.

To erase all Custom Files of all discs (ALL ERASE)
Turn off the controller. While holding down ERASE and FILE, press POWER to turn on the controller. "ALL ERASE" appears in the display, and all Custom Files will be erased.

Labeling Discs (Disc Memo)

You can label discs using up to 12 characters and have the controller display the Disc Memo every time you select the disc. The Disc Memo can be anything you like, such as a title, musician's name, category or date of purchase.



1 Press CD1/2/3 repeatedly to select the player in which the disc you want has been inserted.

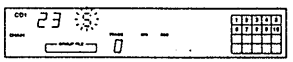
2 Turn the JOG dial to select the disc to which you want to assign a Disc Memo.

To use the JOG dial on the remote
Be sure that the JOG ON/OFF indicator lights red. If not, press JOG ON/OFF once before using the JOG dial.

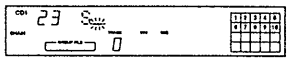
3 Press MEMO INPUT until you find the character type you want.
Each time you press the button, the display shows capital letters (ABC), small letters (abc) and numbers (123) in this order.

4 Turn the JOG dial until the character you want appears in the display.
When you turn the JOG dial clockwise, the characters appear in the following order. Turn the JOG dial counterclockwise to go back to the previous character.

(space) A B C D E F G H I J K L M N O P Q R S T U V W X Y Z & a b c d e f g h i j k l m n o p q r s t u v w x y z ä ö ü : ; ( ) [ ] % $ # 0 1 2 3 4 5 6 7 8 9 10 → ← • / ! ? ' "



5 Press ENTER.
The selected character lights up, and the character entry position moves to the right.
To insert a space, press CLEAR.

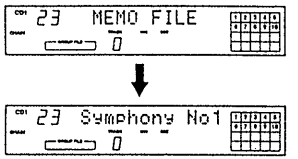


If you have made a mistake
Press ⏮ or ⏭ until the character you want to change flashes, then enter the right letter.

6 Repeat Steps 4 and 5 to input more characters.
When you want to change the character type, go back to Step 3.

To stop labeling a disc
Press ■.

7 Press FILE to store the Disc Memo.
The Disc Memo appears in the display.



Erasing the Disc Memo

1 Press CD1/2/3 repeatedly to select the player in which the disc you want has been inserted.

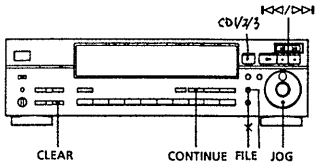
2 Turn the JOG dial to select the disc containing the Disc Memo you want to erase.

3 Press MEMO INPUT.
The first character of the Disc Memo flashes.

4 Press ERASE to erase the Disc Memo.
"FILE ERASE" appears in the display.

Storing Specific Tracks (Delete Bank)

You can delete unwanted tracks and store only the tracks you want. When you select the disc containing a Delete Bank, you can play only the remaining tracks.



1 Press CONTINUE repeatedly until "ONE DISC" appears in the display.

2 Press CD1/2/3 to select the player in which the disc you want has been inserted.

3 Turn the JOG dial to select the disc.
The music calendar shows the tracks on the disc you have selected

To use the JOG dial on the remote
Be sure that the JOG ON/OFF indicator lights red. If not, press JOG ON/OFF once before using the JOG dial.

4 Press ⏮ or ⏭ to select the tracks you want to delete.

5 Press CLEAR.
The track number you have selected disappears from the music calendar.

6 Repeat Steps 4 and 5 to delete more tracks.

7 Press FILE to store the Delete Bank for the selected disc.
"DELETE FILE" appears for a while, and "DELETE" lights up in the display.

You can delete the currently playing track
Press CLEAR while an unwanted track is playing, then press FILE.

You can recover all the tracks temporarily
Hold down CLEAR in the stop mode until "ALL SELECT" appears in the display.

You can make a Delete Bank using the remote
In the ONE DISC Shuffle Play mode, press TRACK and enter the track number to be deleted, then press ENTER. The track number disappears from the music calendar. Repeat this procedure to delete more tracks, then press FILE to store the remaining tracks as a Delete Bank. To recover a track you have deleted, press TRACK, enter the track number again, then press ENTER.

Note
The deleted tracks are skipped even in the Shuffle or Program Play mode (when the whole disc containing a Delete Bank is programmed as one step).

Erasing the Delete Bank

1 Press CD1/2/3 repeatedly to select the player in which the disc you want has been inserted.

2 Turn the JOG dial to select the disc containing a Delete Bank you want to erase.

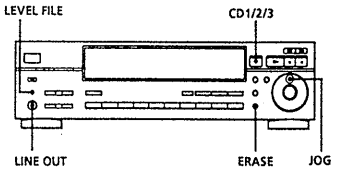
To use the JOG dial on the remote
Be sure that the JOG ON/OFF indicator lights red. If not, press JOG ON/OFF once before using the JOG dial.

3 Press FILE.

4 While "DELETE FILE" is lit in the display, press ERASE.
"FILE ERASE" appears, and the Delete Bank for the selected disc will be erased.

Storing the Optimum Playback Level of a Disc (Level File)

You can store the optimum playback level of the disc. Every time you play the disc, the controller will set the stored level automatically and you don't need to adjust the LINE OUT control on the controller.



1 While playing a disc, adjust the playback level using the LINE OUT control.

2 Press LEVEL FILE to store the playback level for the disc.
"LEVEL FILE" appears for a while, and "LEVEL" lights up in the display.

Erasing the Level File

1 Press CD1/2/3 repeatedly to select the player in which the disc you want has been inserted.

2 Turn the JOG dial to select the disc containing a Level File you want to erase.

To use the JOG dial on the remote
Be sure that the JOG ON/OFF indicator lights red. If not, press JOG ON/OFF once before using the JOG dial.

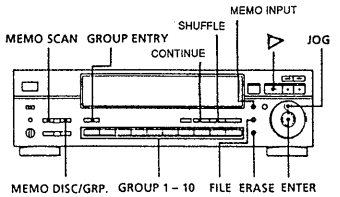
3 Press LEVEL FILE.

4 While "LEVEL FILE" is lit in the display, press ERASE.
"FILE ERASE" appears, and the Level File for the selected disc will be erased.

If you play a disc for which a Level File is not stored
The controller will set the LINE OUT control automatically to the center. If you want to change this initial position stored in the memory, do the following:
1 Adjust the playback level using the LINE OUT control (or LINE OUT LEVEL +/– on the remote).
2 Press LEVEL FILE and FILE at the same time.
"LEVEL INIT." appears in the display, and the position stored in the memory changes to the level you have adjusted.

Grouping Discs (Group File)

You might find that too many discs make it hard to find the disc you want. This controller has a feature that lets you group discs. When you select a disc to which you have assigned a group, the group number indication appears in the display. The controller has 10 preset groups, such as "JAZZ" and "POPS," and each group can contain up to 300 discs. You can also put a disc into multiple groups.
You can enjoy Continuous, Shuffle, or Repeat Play only within a certain group (Group Play). You can also scan groups (Group Scan) or discs in a specific group to find the group or the disc you want quickly.



Assigning group names

Before you group discs, find the group you want. Each group name appears in the display when you press the corresponding GROUP 1 – 10 button.

Press GROUP	To display	
1	Group 1	JAZZ
2	Group 2	POPS
3	Group 3	CLASSICAL
4	Group 4	ROCK
5	Group 5	R & B (Rhythm & Blues)
6	Group 6	BALLADE
7	Group 7	C & W (Country & Western)
8	Group 8	FOR FATHER
9	Group 9	FOR MOTHER
10	Group 10	FOR CHILD

Note
If you load the Custom Files from the players (see page 7) after changing the group names on the CD1 player, the group names already changed and stored in the CD1 player's memory will appear instead of the preset names.

If you want to change the group names, do the following:

1 Press one of GROUP 1 – 10 to select a group.
The preset group name appears in the display. If a disc is already put in the selected gruop, Group Play starts.

2 While the group name is lit in the display, press MEMO INPUT until you find the character type you want.
The first character of the group name flashes. Each time you press the button, the display shows capital letters (ABC), small letters (abc) and numbers (123) cyclically.

3 Turn the JOG dial to select a character, then press ENTER.
The selected character lights up, and the character entry position moves to the next position.

To use the JOG dial on the remote
Be sure that the JOG ON/OFF indicator lights red. If not, press JOG ON/OFF once before using the JOG dial.

4 Repeat Step 3 to change more characters.

5 Press FILE.
"MEMO FILE" appears for a while, and the new group name is stored. You can enter up to 12 characters for a group name. See also "Labeling Discs (Disc Memo)" on page 16 for details.

Note
The group name cannot be changed if some discs has been put into the group.

Putting discs into groups

1 Press CD1/2/3 repeatedly to select the player in which the disc you want has been inserted.

2 Turn the JOG dial to select the disc which you want to put into a group.

To use the JOG dial on the remote
Be sure that the JOG ON/OFF indicator lights red. If not, press JOG ON/OFF once before using the JOG dial.

3 Press GROUP ENTRY.
"GROUP ENTRY" appears in the display, and the navigation display asks you to select one of the groups.

4 Press one of GROUP 1 – 10 to select a group.
The group name appears for a while, then "GROUP FILE" appears, and the group number indication lights up in the display.

You can put the currently playing disc into a group
While playing the disc, follow Steps 3 and 4 above.

Playing discs in a group (Group Play)

You can enjoy Continuous or Shuffle Play within a group.

1 Before you start playing, select the play mode by pressing CONTINUE or SHUFFLE.

When you select	The controller plays
CHAIN Continuous Play	All discs in all players in one group consecutively.
ONE PLAYER Continuous Play	All discs in a specified player in one group consecutively.
ONE DISC Continuous Play	All tracks on a disc (in the current player) in one group.
CHAIN Shuffle Play	All tracks on all discs in all players in one group at random.
ONE PLAYER Shuffle Play	All tracks on all discs in a specified player in one group at random.
ONE DISC Shuffle Play	All track on a disc (in the current player) in one group at random.

2 When you want to specify the player (the first playing player for the CHAIN Continuous and the CHAIN Shuffle Play), press CD1/2/3 repeatedly until the player number you want appears in the display.

2 When you want to specify the the first playing disc (except for the CHAIN and ONE PLAYER Shuffler Play), turn the JOG dial until the disc number you want appears in the display.

To use the JOG dial on the remote
Be sure that the JOG ON/OFF indicator lights red. If not, press JOG ON/OFF once before using the JOG dial.

3 Press one of GROUP 1 – 10 to select a group.
Group Play starts .
If you don't specify the disc, Group Play starts from the disc in the selected group which is located closest to the playing position.

To cancel Group Play
Press ■. "GROUP OFF" appears in the display.

You can start Group Play using the remote
Before you start playing, press GROUP, the number button of the group you want to play, then ENTER.

You can switch the display indication between the group name and the Disc Memo during Group Play
Each time you press MEMO DISC/GRP., the group name and the current Disc Memo appear in the display alternately. When the group name is shown in the display, "GROUP" lights up.

Note
If "–NO ENTRY–" appears in the display, no disc has been put into the selected group.

Locating a disc within a group by scanning each Disc Memo

You can locate a disc you want to play within a specific group quickly by scanning the Disc Memo in the display and start Group Play.
Note that you cannot use this function in the CHAIN Shuffle and ONE PLAYER Shuffle, and Program Play mode.

1 Press one of GROUP 1 – 10 to select the group.
The group name appears in the display, and Group Play starts.

2 Press MEMO SCAN repeatedly until "MEMO SCAN" appears in the display.
The Disc Memos of the discs in the selected group scroll in the display.

Note
"–ENTRY END–" appears in the display when all Disc Memos of the discs in the selected group are checked. (The Disc Memos keeps scrolling.)

3 Press ENTER or ▷ when the Disc Memo of the disc you want appears.
Group Play re-starts from the selected disc.

You can jump to the next or preceding Disc Memo while scanning
Press ⏮ or ⏭.

Locating a group by scanning each group name (Group Scan)

You can locate a group you want to play quickly by scanning the group names in the display and start Group Play.
Note that you cannot use this function in Program Play mode.

1 Before you start playing, press MEMO SCAN repeatedly until "GROUP SCAN" appears in the display.
The group names scroll in the display.

2 Press ENTER or ▷ when the group name you want appears.
Group Play starts.

You can jump to the next or preceding group while scanning
Press ⏮ or ⏭.

Deleting discs from a group

1 Press CD1/2/3 repeatedly to select the player in which the disc you want has been inserted.

2 Turn the JOG dial to select the disc which you want to delete from a group.

To use the JOG dial on the remote
Be sure that the JOG ON/OFF indicator lights red. If not, press JOG ON/OFF once before using the JOG dial.

3 Press GROUP ENTRY.
"GROUP ENTRY" appears in the display, and the navigation display asks you to select one of the groups.

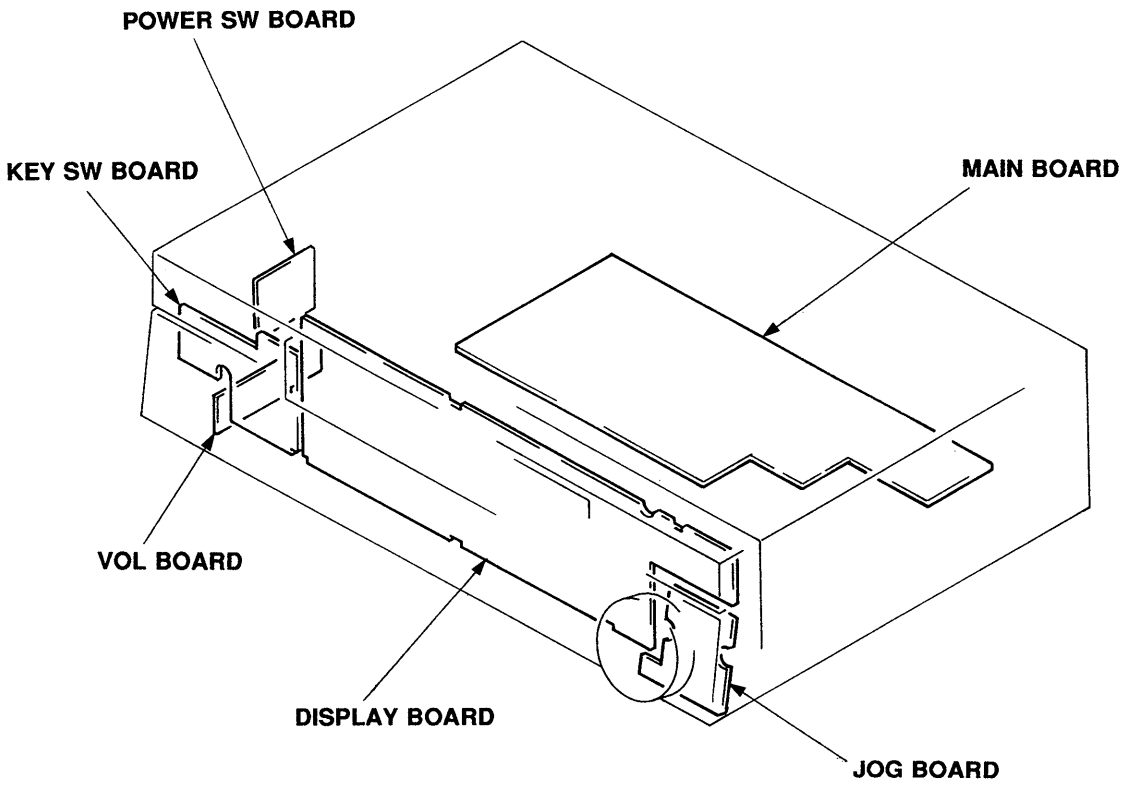
4 Press one of GROUP 1 – 10 to select a group.
The group name appears for a while, then "GROUP FILE" appears, and the group number indication lights up in the display.

5 While "GROUP FILE" is lit in the display, press ERASE.
"FILE ERASE" appears, and the group number indication disappears from the display.

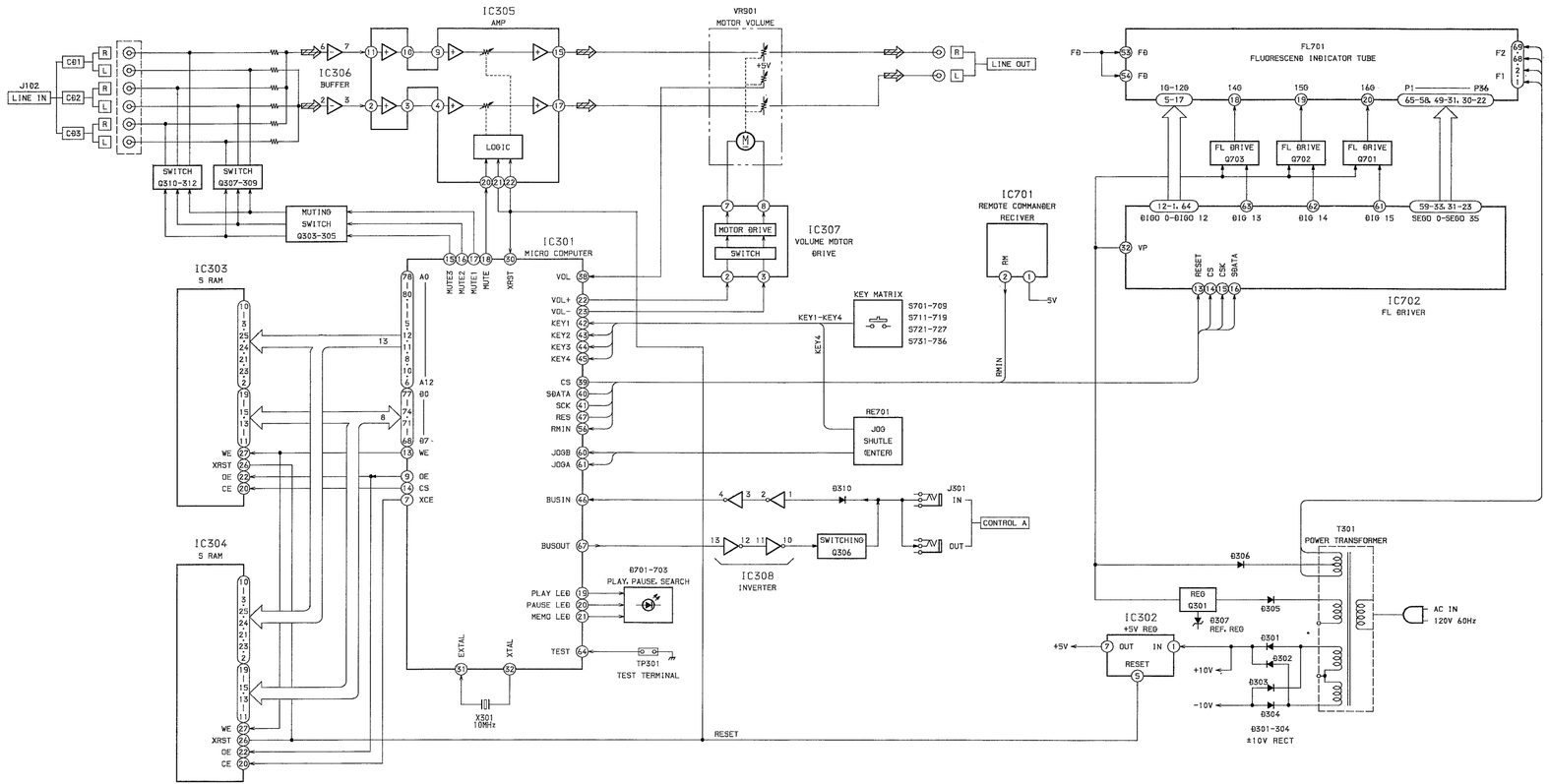
You can delete the currently playing disc from a group
While playing the disc, follow Steps 3 to 5 above.

SECTION 2
DIAGRAMS

2-1. CIRCUIT BOARDS LOCATION

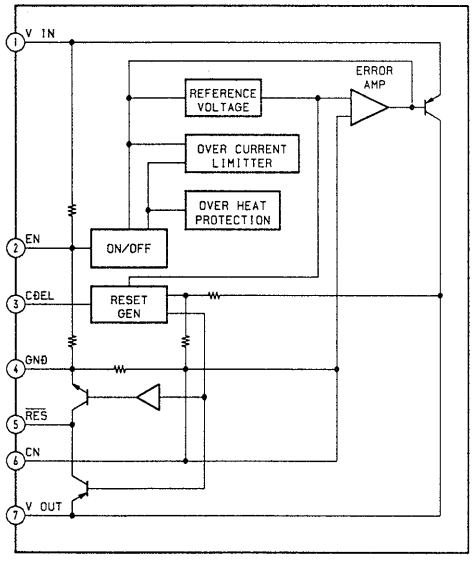


2-2. BLOCK DIAGRAM

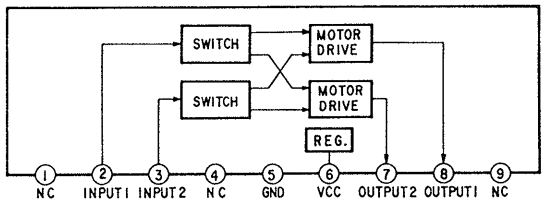


• IC Block Diagrams

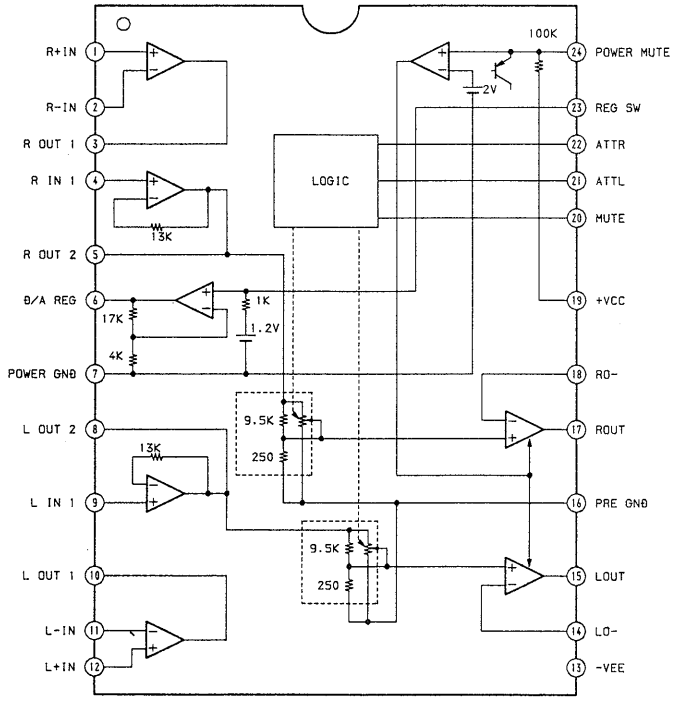
IC302 LA5602



IC307 BA6208

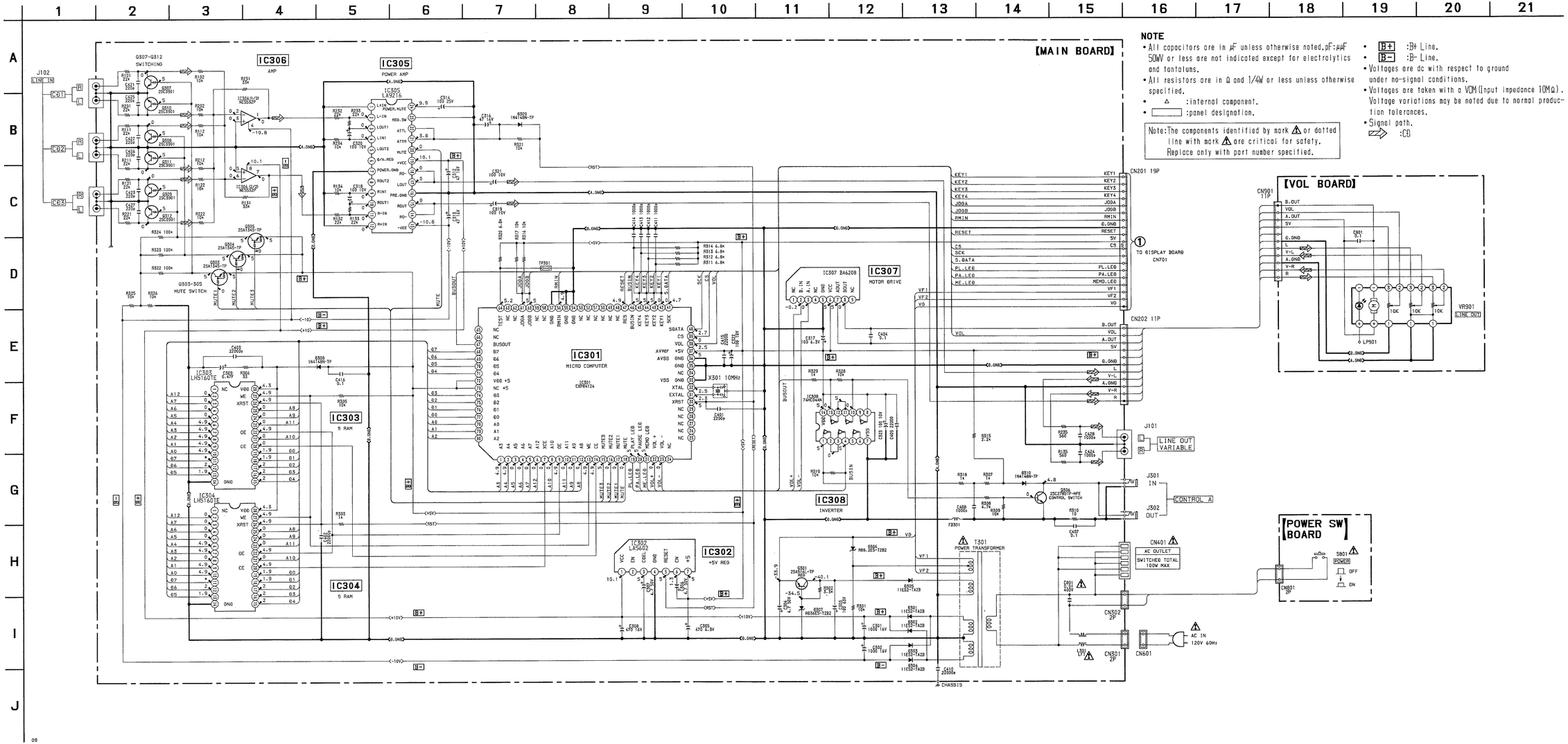


IC305 LA9216



2-3. SCHEMATIC DIAGRAM — MAIN SECTION —

• See page 31 for IC Pin Function. (IC301)



NOTE

- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4W or less unless otherwise specified.
- △ : internal component.
- ▭ : panel designation.

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

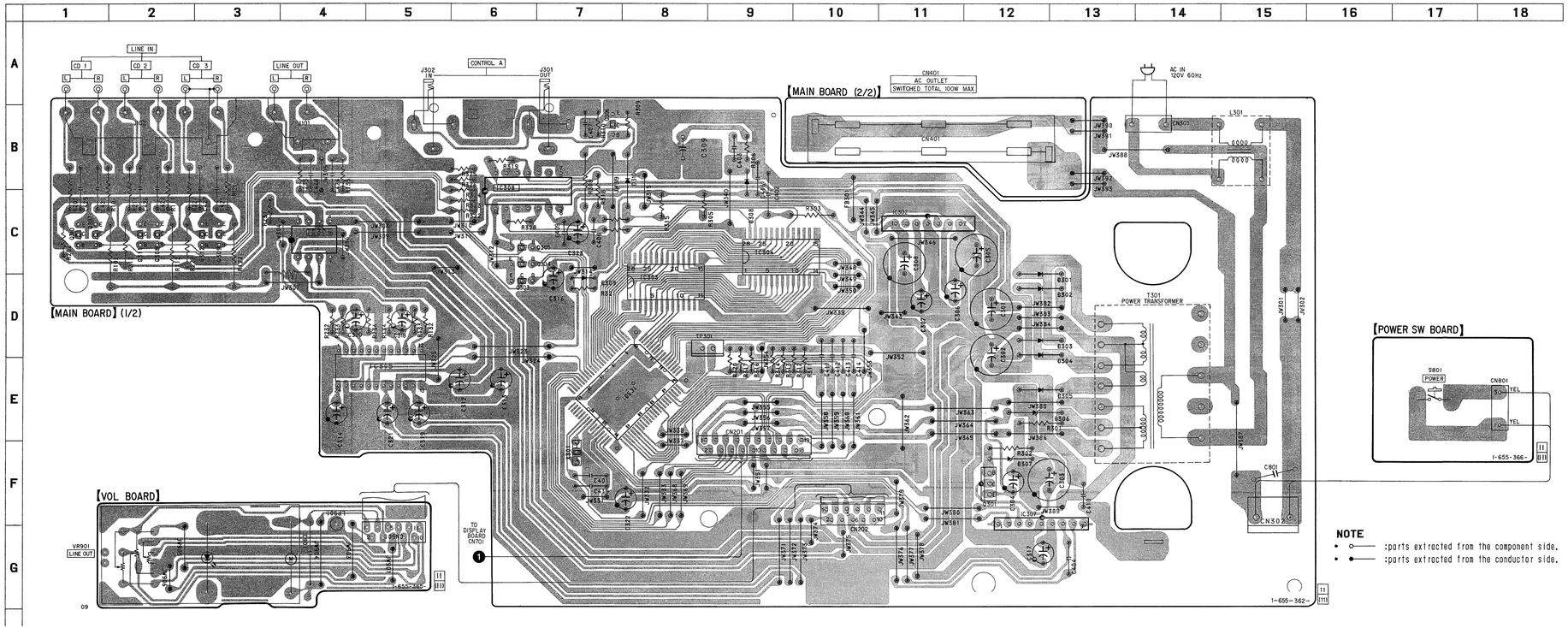
- B+ : B+ Line.
- B− : B− Line.
- Voltages are dc with respect to ground under no-signal conditions.
- Voltages are taken with a VOM (Input impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
- Signal path. ⇨ : CD

2-4. PRINTED WIRING BOARD — MAIN SECTION —

• See page 11 for Circuit Board Location.
• See page 30 for Semiconductor Lead Layouts.

• Semiconductor Location

Ref. No.	Location
D301	D-12
D302	D-12
D303	D-12
D304	E-12
D305	E-12
D306	E-12
D307	F-12
D308	B-9
D309	D-6
D310	B-7
IC301	E-8
IC302	C-11
IC303	C-9
IC304	D-7
IC305	E-5
IC306	C-4
IC307	G-12
IC308	C-6
Q301	F-12
Q303	D-6
Q304	C-6
Q305	C-6
Q306	B-7
Q307	C-1
Q308	C-2
Q309	C-3
Q310	C-1
Q311	C-2
Q312	C-3

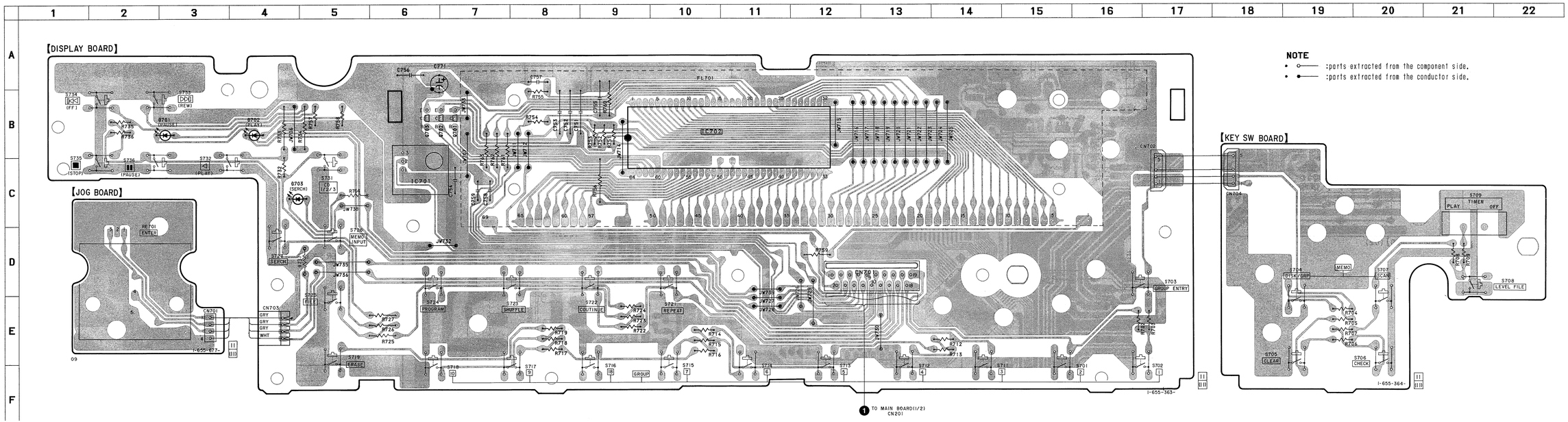


2-5. PRINTED WIRING BOARD — DISPLAY SECTION —

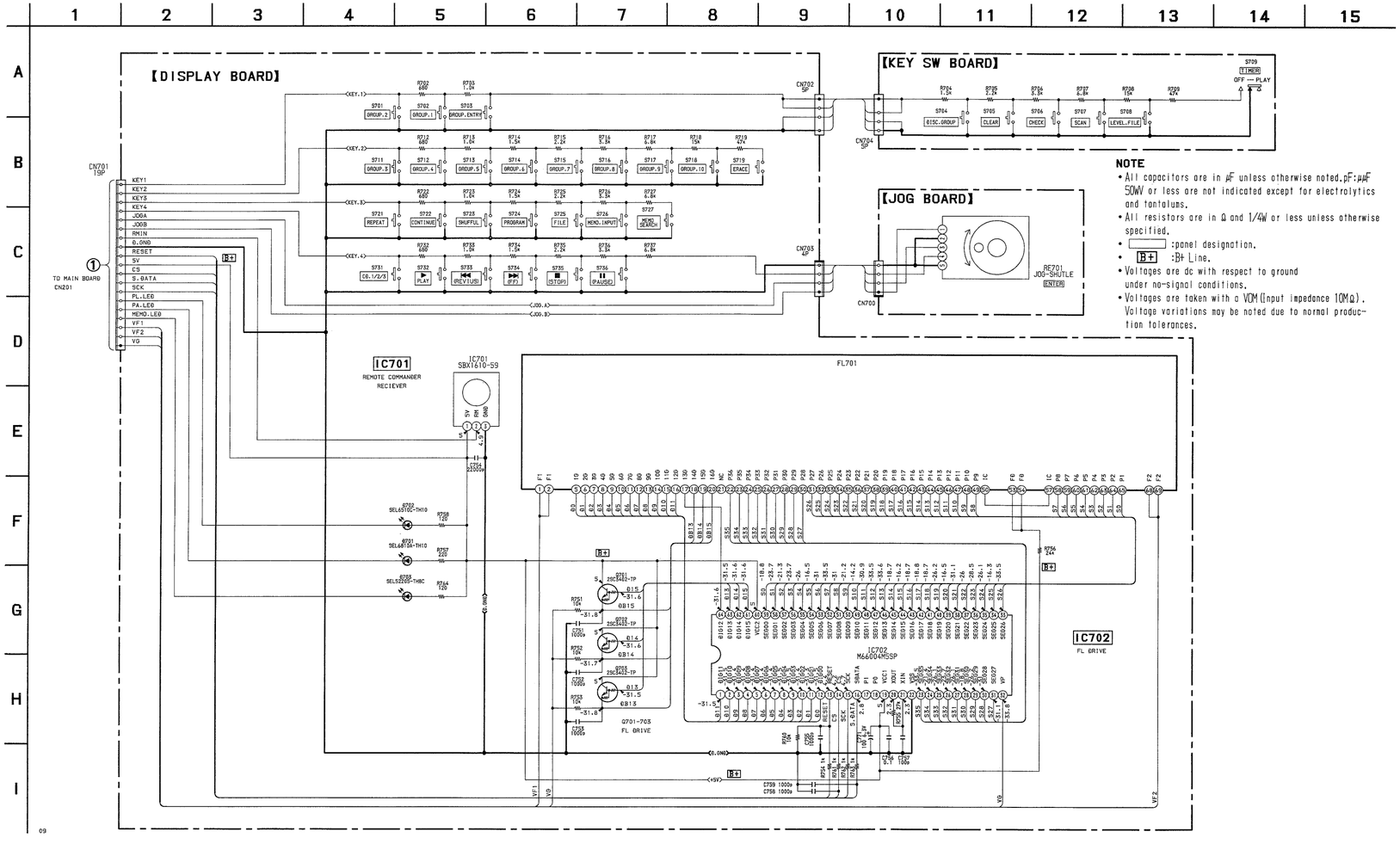
• See page 11 for Circuit Board Location.
• See page 30 for Semiconductor Lead Layouts.

• Semiconductor Location

Ref. No.	Location
D701	B-3
D702	B-4
D703	C-4
IC701	C-6
IC702	B-11
Q701	B-7
Q702	B-7
Q703	B-6



2-6. SCHEMATIC DIAGRAM — DISPLAY SECTION —

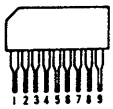


NOTE

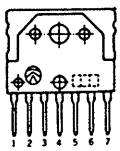
- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4W or less unless otherwise specified.
- ▭ : panel designation.
- B+ : B+ Line.
- Voltages are dc with respect to ground under no-signal conditions.
- Voltages are taken with a VOM (Input impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.

2-7. SEMICONDUCTOR LEAD LAYOUTS

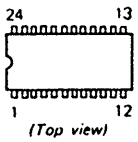
BA6208



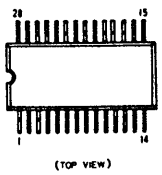
LA5602



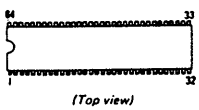
LA9216



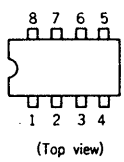
LH5160TF



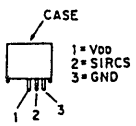
M66004M5SP



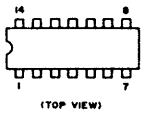
NE5532P



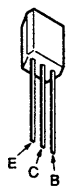
SBX1610-59



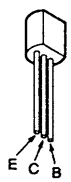
SN74HC04AN



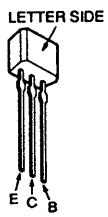
DTA144ES
DTC114ES
DTC143TS



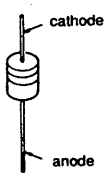
2SA1371



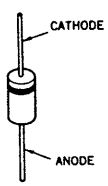
2SC2785-HFE



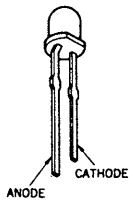
RD8.2ES-B2
RD36ES-T2B2
11ES2



1N4148M



SEL2510C-D
SEL2810A
SEL5220S-TH8C



2-8. IC PIN FUNCTION

- **IC301 MICRO COMPUTER (CXP-84124-TCA994)**

Pin No.	Pin Name	I/O	Function
1	A3	O	S RAM address control output.
2	A4	O	
3	A5	O	
4	A6	O	
5	A7	O	
6	A8	O	
7	XCE	O	S RAM unchip-enable output.
8	A9	O	S RAM address control output.
9	OE	O	S RAM output enable.
10	A10	O	S RAM address control output.
11	A11	O	
12	A12	O	
13	WE	O	S RAM write-enable output.
14	CE	O	S RAM chip-enable output.
15	MUTE 3	O	Line in MUTE 3.
16	MUTE 2	O	Line in MUTE 2.
17	MUTE 1	O	Line in MUTE 1.
18	L MUTE	O	Line out muting.
19	PLY. LED	O	PLAY LED ON/OFF. ON: "L"
20	PAU. LED	O	PAUSE LED ON/OFF. ON: "L"
21	S. LED	O	SEARCH LED ON/OFF. ON: "L"
22	V. UP	O	LINE OUT volume motor drive.
23	V. DOWN	O	
24	——	–	Not used. (Open)
25	——	–	
26	——	–	
27	——	–	
28	——	–	
29	——	–	
30	RESET	I	Reset signal input.
31	10MHz	I	Clock signal input. (10MHz)
32	10MHz	O	Clock signal output. (10MHz)
33	Vss	–	GND
34	——	–	Not used. (Open)
35	Vss	–	GND
36	Vss	–	GND
37	V_{DD}	–	+5V
38	VOLS	I	LINE OUT volume positioning sensor.
39	FLCS	O	FL-driver chip selection.
40	FLDATA	O	FL-driver data signal.

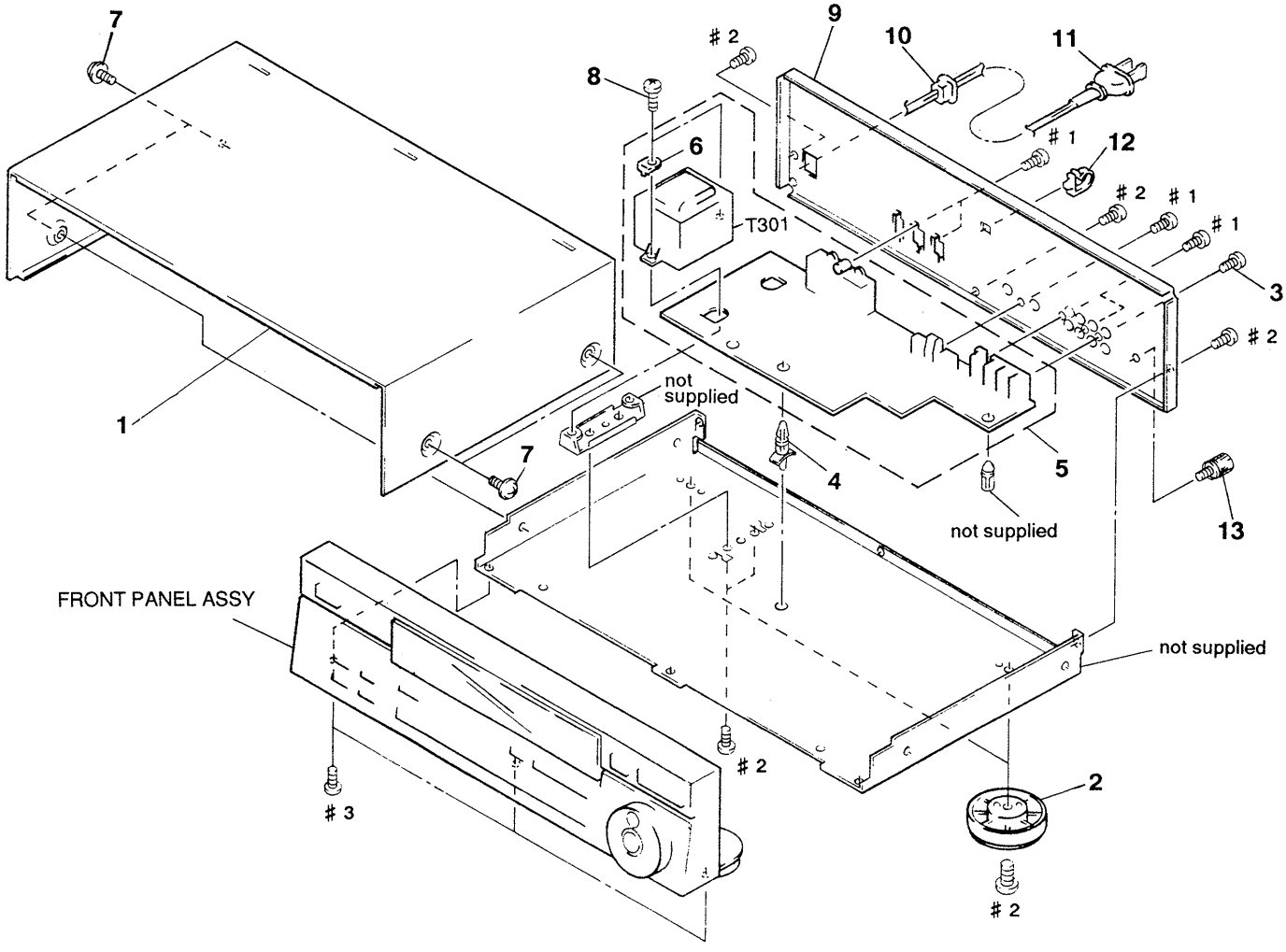
Pin No.	Pin Name	I/O	Function
41	FLCK	O	FL-driver clock signal.
42	KEY 1	I	KEY input. (A/D)
43	KEY 2	I	
44	KEY 3	I	
45	KEY 4	I	
46	BUSIN	I	CONTROL-A receiving signal.
47	FLRES	O	FL-driver reset signal.
48	——	–	Not used. (OPEN)
49	——	–	
50	——	–	
51	——	–	
52	——	–	
53	——	–	
54	Vss	–	GND
55	Vss	–	
56	RMIN	I	Remote commander signal.
57	JMODE	I	Connected to GND.
58	——	–	Not used. (Open)
59	——	–	
60	JOG B	I	JOG dial
61	JOG A	I	
62	——	–	Not used. (Open)
63	——	–	
64	TEST	I	TEST mode selection. Normally: "H"
65	——	–	Not used. (Open)
66	——	–	
67	BUSOUT	O	CONTROL-A transmission signal.
68	D0	I/O	S RAM data bus.
69	D1	I/O	
70	D2	I/O	
71	D3	I/O	
72	VDD	–	+5V
73	VDD	–	
74	D4	I/O	S RAM data bus.
75	D5	I/O	
76	D6	I/O	
77	D7	I/O	
78	A0	O	S RAM address control output.
79	A1	O	
80	A2	O	

SECTION 3
EXPLODED VIEWS

NOTE:
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list and accessories and packing materials are given in the last of this parts list.

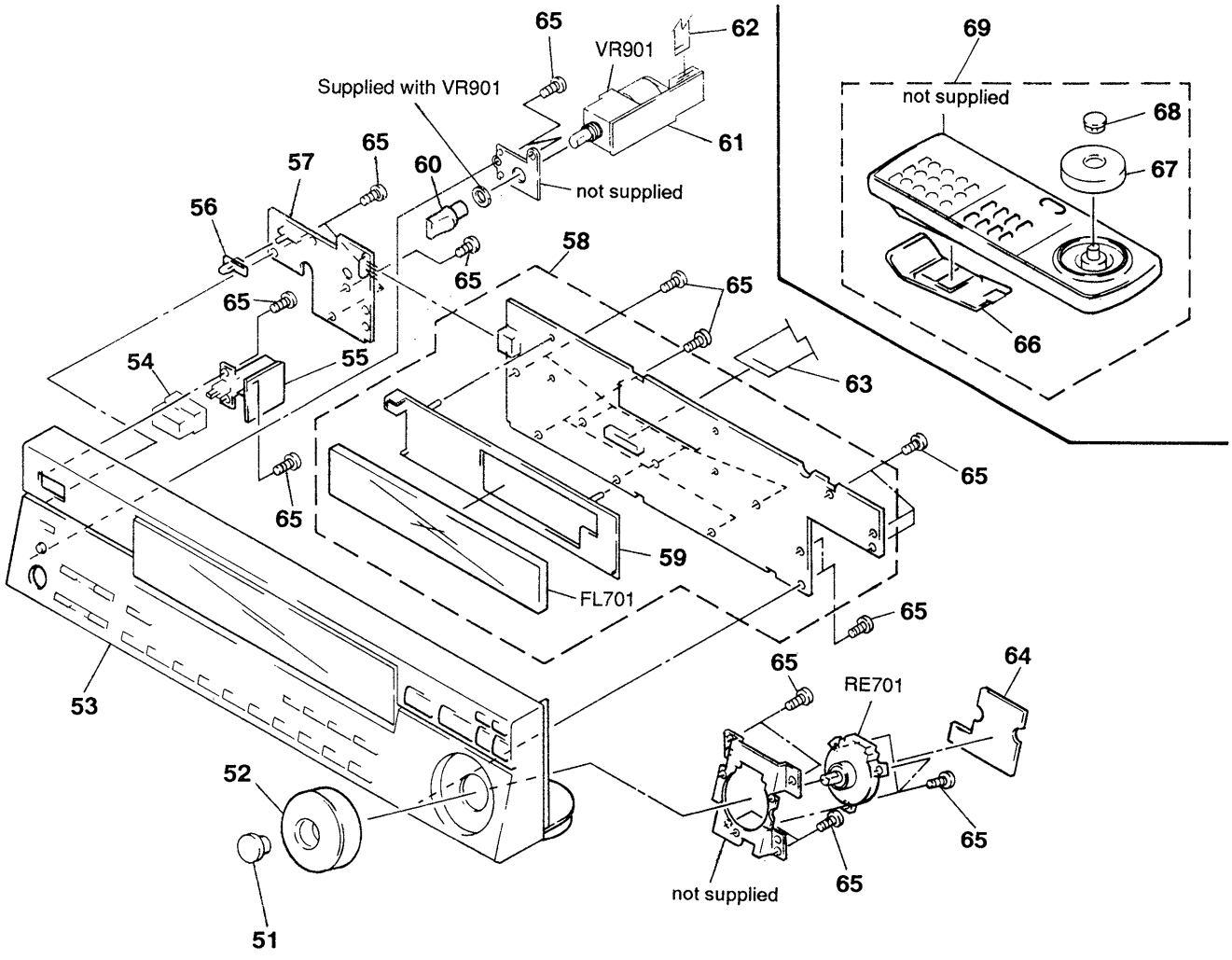
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

3-1. CASE SECTION



Ref. No.	Part No.	Description	Remark
1	3-332-578-61	CASE	
2	4-956-885-01	FOOT (F58175S2W)	
3	3-704-515-11	SCREW (BV/RING)	
* 4	3-346-265-11	HOLDER, PC BOARD	
* 5	A-4673-429-A	MAIN BOARD, COMPLETE	
6	4-957-933-01	PLATE, GROUND	
7	3-704-366-01	SCREW (CASE) (M3X8)	
8	2-383-566-00	SCREW	
* 9	4-971-795-01	PANEL, BACK	
* 10	3-703-244-00	BUSHING (2104), CORD	
⚠11	1-590-836-11	CORD, POWER	
* 12	4-949-235-01	HOOK	
13	4-947-010-01	SCREW, FEEDER FIXED	
⚠T301	1-427-815-11	TRANSFORMER, POWER	

3-2. FRONT PANEL SECTION



Ref. No.	Part No.	Description	Remark
51	4-960-509-01	BUTTON (ENTER)	
52	4-960-510-01	KNOB (JOG)	
53	X-4945-639-1	PANEL ASSY, FRONT	
54	4-917-460-01	KNOB, POWER	
* 55	1-655-366-11	POWER SW BOARD	
56	4-943-114-01	BUTTON (TIMER)	
* 57	1-655-364-11	KEY SW BOARD	
* 58	A-4673-430-A	DISPLAY BOARD, COMPLETE	
59	4-960-501-01	HOLDER (FL TUBE)	
60	4-950-189-01	KNOB (A) (VOL)	
* 61	1-655-365-11	VOL BOARD	

Ref. No.	Part No.	Description	Remark
62	1-769-401-11	WIRE (FLAT TYPE) (11 CORE)	
63	1-769-402-11	WIRE (FLAT TYPE) (19 CORE)	
* 64	1-655-677-11	JOG BOARD	
65	4-951-620-01	SCREW (2.6X8), +BVTP	
66	3-943-535-01	COVER, BATTERY	
67	4-960-546-01	DIAL, JOG	
68	4-960-547-01	BUTTON (JOG DIAL)	
69	1-473-055-11	REMOTE COMMANDER (RM-D300C)	
FL701	1-517-393-11	INDICATOR TUBE, FLUORESCENT	
RE701	1-692-615-11	SWITCH, JOG (ENTER)	
VR901	1-241-917-11	RES, VAR, CARBON 10k/10k/10k (LINE OUT)	

SECTION 4
ELECTRICAL PARTS LIST

DISPLAY

NOTE:

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

When indicating parts by reference number, please include the board name.

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- -XX, -X mean standardized parts, so they may have some difference from the original one.

- RESISTORS
  All resistors are in ohms
  METAL: Metal-film resistor
  METAL OXIDE: Metal Oxide-film resistor
  F : nonflammable
- SEMICONDUCTORS
  In each case, u: μ , for example:
  uA...: μA..., uPA...: μPA..., uPB...: μPB..., uPC...: μPC..., uPD...: μPD...
- CAPACITORS
  uF : μF
- COILS
  uH : μH

Ref.No.	Part No.	Description				Remark
*	A-4673-430-A	DISPLAY BOARD, COMPLETE				
		**********				
	4-960-501-01	HOLDER (FL TUBE)				
		< CAPACITOR >				
C751	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C752	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C753	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C754	1-161-494-00	CERAMIC	0.022uF		25V	
C755	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C756	1-164-159-11	CERAMIC	0.1uF		50V	
C757	1-162-282-31	CERAMIC	100PF	10%	50V	
C758	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C759	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C771	1-124-443-00	ELECT	100uF	20%	10V	
		< CONNECTOR >				
CN701	1-691-650-11	SOCKET, CONNECTOR 19P				
* CN702	1-691-746-11	CONNECTOR, BOARD TO BOARD 5P				
* CN704	1-691-670-11	CONNECTOR, BOARD TO BOARD 5P				
* CN803	1-568-942-11	PIN, CONNECTOR 4P				
		< DIODE >				
D701	8-719-301-49	LED	SEL2810A (PAUSE)			
D702	8-719-303-02	DIODE	SEL2510C-D (PLAY)			
D703	8-719-038-63	DIODE	SEL5220S-TH8C (SEARCH)			
		< FLUORESCENT INDICATOR >				
FL701	1-517-393-11	INDICATOR TUBE, FLUORESCENT				
		< IC >				
IC701	8-741-810-59	IC	SBX1610-59			
IC702	8-759-183-27	IC	M66004M5SP			
		< TRANSISTOR >				
Q701	8-729-900-80	TRANSISTOR	DTC114ES			
Q702	8-729-900-80	TRANSISTOR	DTC114ES			
Q703	8-729-900-80	TRANSISTOR	DTC114ES			
		< RESISTOR >				
R702	1-249-415-11	CARBON	680	5%	1/4W	F
R703	1-249-417-11	CARBON	1K	5%	1/4W	F
R704	1-249-419-11	CARBON	1.5K	5%	1/4W	F
R705	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R706	1-249-423-11	CARBON	3.3K	5%	1/4W	F
R707	1-249-427-11	CARBON	6.8K	5%	1/4W	F
R708	1-249-431-11	CARBON	15K	5%	1/4W	
R709	1-249-437-11	CARBON	47K	5%	1/4W	
R712	1-249-415-11	CARBON	680	5%	1/4W	F
R713	1-249-417-11	CARBON	1K	5%	1/4W	F
R714	1-249-419-11	CARBON	1.5K	5%	1/4W	F
R715	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R716	1-249-423-11	CARBON	3.3K	5%	1/4W	F
R717	1-249-427-11	CARBON	6.8K	5%	1/4W	F
R718	1-249-431-11	CARBON	15K	5%	1/4W	
R719	1-249-437-11	CARBON	47K	5%	1/4W	
R722	1-249-415-11	CARBON	680	5%	1/4W	F
R723	1-249-417-11	CARBON	1K	5%	1/4W	F
R724	1-249-419-11	CARBON	1.5K	5%	1/4W	F
R725	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R726	1-249-423-11	CARBON	3.3K	5%	1/4W	F
R727	1-249-427-11	CARBON	6.8K	5%	1/4W	F
R732	1-249-415-11	CARBON	680	5%	1/4W	F
R733	1-249-417-11	CARBON	1K	5%	1/4W	F
R734	1-249-419-11	CARBON	1.5K	5%	1/4W	F
R735	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R736	1-249-423-11	CARBON	3.3K	5%	1/4W	F
R737	1-249-427-11	CARBON	6.8K	5%	1/4W	F
R751	1-249-429-11	CARBON	10K	5%	1/4W	
R752	1-249-429-11	CARBON	10K	5%	1/4W	
R753	1-249-429-11	CARBON	10K	5%	1/4W	
R754	1-249-417-11	CARBON	1K	5%	1/4W	F
R755	1-249-434-11	CARBON	27K	5%	1/4W	
R756	1-247-864-11	CARBON	24K	5%	1/4W	
R757	1-249-409-11	CARBON	220	5%	1/4W	F
R758	1-249-406-11	CARBON	120	5%	1/4W	F
R760	1-249-429-11	CARBON	10K	5%	1/4W	
R761	1-249-417-11	CARBON	1K	5%	1/4W	F
R762	1-249-417-11	CARBON	1K	5%	1/4W	F
R763	1-249-417-11	CARBON	1K	5%	1/4W	F
R764	1-249-406-11	CARBON	120	5%	1/4W	F
		< SWITCH >				
S701	1-554-303-21	SWITCH, TACTILE (GROUP 2)				
S702	1-554-303-21	SWITCH, TACTILE (GROUP 1)				
S703	1-554-303-21	SWITCH, TACTILE (GROUP ENTRY)				

DISPLAY | JOG | KEY SW | MAIN

Ref. No.	Part No.	Description	Remark
S711	1-554-303-21	SWITCH, TACTILE (GROUP 3)	
S712	1-554-303-21	SWITCH, TACTILE (GROUP 4)	
S713	1-554-303-21	SWITCH, TACTILE (GROUP 5)	
S714	1-554-303-21	SWITCH, TACTILE (GROUP 6)	
S715	1-554-303-21	SWITCH, TACTILE (GROUP 7)	
S716	1-554-303-21	SWITCH, TACTILE (GROUP 8)	
S717	1-554-303-21	SWITCH, TACTILE (GROUP 9)	
S718	1-554-303-21	SWITCH, TACTILE (GROUP 10)	
S719	1-554-303-21	SWITCH, TACTILE (ERASE)	
S721	1-554-303-21	SWITCH, TACTILE (REPEAT)	
S722	1-554-303-21	SWITCH, TACTILE (CONTINUE)	
S723	1-554-303-21	SWITCH, TACTILE (SHUFFUL)	
S724	1-554-303-21	SWITCH, TACTILE (PROGRAM)	
S725	1-554-303-21	SWITCH, TACTILE (FILE)	
S726	1-554-303-21	SWITCH, TACTILE (MEMO INPUT)	
S727	1-554-303-21	SWITCH, TACTILE (SEARCH)	
S731	1-554-303-21	SWITCH, TACTILE (CD 1/2/3)	
S732	1-554-303-21	SWITCH, TACTILE (▷)	
S733	1-554-303-21	SWITCH, TACTILE (⏮◁)	
S734	1-554-303-21	SWITCH, TACTILE (▷⏭)	
S735	1-554-303-21	SWITCH, TACTILE (■)	
S736	1-554-303-21	SWITCH, TACTILE (▮▮)	
**********			
*	1-655-677-11	JOG BOARD	
		*********	
		< SWITCH >	
RE701	1-692-615-11	SWITCH, JOG (ENTER)	
**********			
*	1-655-364-11	KEY SW BOARD	
		**********	
		< SWITCH >	
S704	1-554-303-21	SWITCH, TACTILE (DISC/GRP)	
S705	1-554-303-21	SWITCH, TACTILE (MEMO CLEAR)	
S706	1-554-303-21	SWITCH, TACTILE (CHECK)	
S707	1-554-303-21	SWITCH, TACTILE (MEMO SCAN)	
S708	1-554-303-21	SWITCH, TACTILE (LEVEL FILE)	
S709	1-570-157-51	SWITCH, SLIDE (TIMER OFF/PLAY)	
**********			
*	A-4673-429-A	MAIN BOARD, COMPLETE	
		********	
	4-957-933-01	PLATE, GROUND	

Ref. No.	Part No.	Description			Remark
		< CAPACITOR >			
C301	1-124-360-00	ELECT	1000uF	20%	16V
C302	1-124-360-00	ELECT	1000uF	20%	16V
C303	1-124-572-11	ELECT	100uF	20%	63V
C304	1-126-163-11	ELECT	4.7uF	20%	50V
C305	1-124-472-11	ELECT	470uF	20%	10V
C306	1-126-163-11	ELECT	4.7uF	20%	50V
C307	1-126-163-11	ELECT	4.7uF	20%	50V
C308	1-126-012-11	ELECT	470uF	20%	16V
C309	1-125-446-11	CAP, DOUBLE LAYERS			0.47F
C312	1-126-022-11	ELECT	47uF	20%	16V
C313	1-126-022-11	ELECT	47uF	20%	16V
C314	1-124-478-11	ELECT	100uF	20%	25V
C316	1-126-022-11	ELECT	47uF	20%	16V
C317	1-124-443-00	ELECT	100uF	20%	10V
C318	1-124-994-11	ELECT	100uF	20%	10V
C319	1-124-994-11	ELECT	100uF	20%	10V
C320	1-124-994-11	ELECT	100uF	20%	10V
C321	1-124-994-11	ELECT	100uF	20%	10V
C322	1-124-994-11	ELECT	100uF	20%	10V
C323	1-124-994-11	ELECT	100uF	20%	10V
C401	1-162-302-11	CERAMIC	0.0022uF	30%	16V
C402	1-161-494-00	CERAMIC	0.022uF		25V
C403	1-161-494-00	CERAMIC	0.022uF		25V
C404	1-164-159-11	CERAMIC	0.1uF		50V
C407	1-164-159-11	CERAMIC	0.1uF		50V
C408	1-162-294-31	CERAMIC	0.001uF	10%	50V
C409	1-161-494-00	CERAMIC	0.022uF		25V
C410	1-161-494-00	CERAMIC	0.022uF		25V
C411	1-162-294-31	CERAMIC	0.001uF	10%	50V
C412	1-162-294-31	CERAMIC	0.001uF	10%	50V
C413	1-162-294-31	CERAMIC	0.001uF	10%	50V
C414	1-162-294-31	CERAMIC	0.001uF	10%	50V
C415	1-161-494-00	CERAMIC	0.022uF		25V
C416	1-164-159-11	CERAMIC	0.1uF		50V
C421	1-162-286-31	CERAMIC	220PF	10%	50V
C422	1-162-286-31	CERAMIC	220PF	10%	50V
C423	1-162-286-31	CERAMIC	220PF	10%	50V
C424	1-162-294-31	CERAMIC	0.001uF	10%	50V
C425	1-162-286-31	CERAMIC	220PF	10%	50V
C426	1-162-286-31	CERAMIC	220PF	10%	50V
C427	1-162-286-31	CERAMIC	220PF	10%	50V
C428	1-162-294-31	CERAMIC	0.001uF	10%	50V
⚠C801	1-161-744-51	CERAMIC	0.01uF		400V
		< CONNECTOR >			
CN201	1-568-802-11	SOCKET, CONNECTOR 19P			
* CN202	1-568-830-11	SOCKET, CONNECTOR 11P			
CN301	1-580-230-11	PIN, CONNECTOR (PC BOARD) 3P			
CN302	1-564-321-00	PIN, CONNECTOR 2P			

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description	Remark
⚠CN401	1-540-062-11	OUTLET, AC	
		< DIODE >	
D301	8-719-200-82	DIODE 11ES2	
D302	8-719-200-82	DIODE 11ES2	
D303	8-719-200-82	DIODE 11ES2	
D304	8-719-200-82	DIODE 11ES2	
D305	8-719-200-82	DIODE 11ES2	
D306	8-719-110-08	DIODE RD8.2ES-B2	
D307	8-719-114-10	DIODE RD36ES-T2B2	
D308	8-719-987-63	DIODE 1N4148M	
D309	8-719-987-63	DIODE 1N4148M	
D310	8-719-987-63	DIODE 1N4148M	
		< INDUCTOR >	
FB301	1-412-473-21	INDUCTOR	
		< IC >	
IC301	8-752-865-78	IC CXP84124-TCA994	
IC302	8-759-061-65	IC LA5602	
IC303	8-759-289-94	IC LH5160TF	
IC304	8-759-289-94	IC LH5160TF	
IC305	8-759-160-55	IC LA9216	
IC306	8-759-900-72	IC NE5532P	
IC307	8-759-962-08	IC BA6208	
IC308	8-759-916-14	IC SN74HC04AN	
		< JACK >	
J101	1-565-352-41	JACK, PIN 2P (LINE OUT, VARIABLE L/R)	
J102	1-565-320-61	JACK, PIN 6P (LINE IN CD1/CD2/CD3)	
J301	1-766-728-11	JACK (DIA. 3.5) (CONTROL A IN)	
J302	1-766-728-11	JACK (DIA. 3.5) (CONTROL A OUT)	
		< COIL >	
⚠L301	1-421-915-11	COIL, LINE FILTER	
		< TRANSISTOR >	
Q301	8-729-803-76	TRANSISTOR 2SA1371	
Q303	8-729-900-65	TRANSISTOR DTA144ES	
Q304	8-729-900-65	TRANSISTOR DTA144ES	
Q305	8-729-900-65	TRANSISTOR DTA144ES	
Q306	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q307	8-729-900-74	TRANSISTOR DTC143TS	
Q308	8-729-900-74	TRANSISTOR DTC143TS	
Q309	8-729-900-74	TRANSISTOR DTC143TS	
Q310	8-729-900-74	TRANSISTOR DTC143TS	
Q311	8-729-900-74	TRANSISTOR DTC143TS	
Q312	8-729-900-74	TRANSISTOR DTC143TS	

Ref. No.	Part No.	Description			Remark
		< RESISTOR >			
R101	1-249-433-11	CARBON 22K	5%	1/4W	
R102	1-249-429-11	CARBON 10K	5%	1/4W	
R111	1-249-433-11	CARBON 22K	5%	1/4W	
R112	1-249-429-11	CARBON 10K	5%	1/4W	
R121	1-249-433-11	CARBON 22K	5%	1/4W	
R122	1-249-429-11	CARBON 10K	5%	1/4W	
R131	1-249-435-11	CARBON 33K	5%	1/4W	
R132	1-249-433-11	CARBON 22K	5%	1/4W	
R133	1-249-433-11	CARBON 22K	5%	1/4W	
R134	1-249-429-11	CARBON 10K	5%	1/4W	
R135	1-249-414-11	CARBON 560	5%	1/4W	F
R201	1-249-433-11	CARBON 22K	5%	1/4W	
R202	1-249-429-11	CARBON 10K	5%	1/4W	
R211	1-249-433-11	CARBON 22K	5%	1/4W	
R212	1-249-429-11	CARBON 10K	5%	1/4W	
R221	1-249-433-11	CARBON 22K	5%	1/4W	
R222	1-249-429-11	CARBON 10K	5%	1/4W	
R231	1-249-435-11	CARBON 33K	5%	1/4W	
R232	1-249-433-11	CARBON 22K	5%	1/4W	
R233	1-249-433-11	CARBON 22K	5%	1/4W	
R234	1-249-429-11	CARBON 10K	5%	1/4W	
R235	1-249-414-11	CARBON 560	5%	1/4W	F
R301	1-249-429-11	CARBON 10K	5%	1/4W	
R302	1-249-423-11	CARBON 3.3K	5%	1/4W	F
R303	1-249-417-11	CARBON 1K	5%	1/4W	F
R305	1-249-429-11	CARBON 10K	5%	1/4W	
R306	1-249-399-11	CARBON 33	5%	1/4W	F
R307	1-249-417-11	CARBON 1K	5%	1/4W	F
R308	1-249-425-11	CARBON 4.7K	5%	1/4W	F
R309	1-249-429-11	CARBON 10K	5%	1/4W	
R310	1-249-393-11	CARBON 10	5%	1/4W	F
R311	1-249-427-11	CARBON 6.8K	5%	1/4W	F
R312	1-249-427-11	CARBON 6.8K	5%	1/4W	F
R313	1-249-427-11	CARBON 6.8K	5%	1/4W	F
R314	1-249-427-11	CARBON 6.8K	5%	1/4W	F
R315	1-249-421-11	CARBON 2.2K	5%	1/4W	F
R316	1-249-429-11	CARBON 10K	5%	1/4W	
R317	1-249-429-11	CARBON 10K	5%	1/4W	
R318	1-249-417-11	CARBON 1K	5%	1/4W	F
R319	1-249-429-11	CARBON 10K	5%	1/4W	
R320	1-249-427-11	CARBON 6.8K	5%	1/4W	F
R321	1-249-429-11	CARBON 10K	5%	1/4W	
R322	1-249-441-11	CARBON 100K	5%	1/4W	
R323	1-249-441-11	CARBON 100K	5%	1/4W	
R324	1-249-441-11	CARBON 100K	5%	1/4W	
R325	1-249-429-11	CARBON 10K	5%	1/4W	
R326	1-249-429-11	CARBON 10K	5%	1/4W	
R328	1-249-429-11	CARBON 10K	5%	1/4W	
R329	1-249-417-11	CARBON 1K	5%	1/4W	F

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

MAIN | POWER SW | VOL

Ref. No.	Part No.	Description	Remark
		< TRANSFORMER >	
⚠T301	1-427-815-11	TRANSFORMER, POWER	
		< TEST PIN >	
* TP301	1-560-060-00	PIN, CONNECTOR 2P	
		< VIBRATOR >	
X301	1-579-175-11	VIBRATOR, CERAMIC (10MHz)	
**********			
*	1-655-366-11	POWER SW BOARD **********	
		< CONNECTOR >	
CN801	1-690-122-41	REED (WITH CONNECTOR) (2 CORE)	
		< SWITCH >	
⚠S801	1-572-267-51	SWITCH, PUSH (AC POWER) (1 KEY)	(POWER ON/OFF)
**********			
*	1-655-365-11	VOL BOARD *********	
		< CAPACITOR >	
C901	1-164-159-11	CERAMIC 0.1uF	50V
		< CONNECTOR >	
* CN901	1-568-854-11	SOCKET, CONNECTOR 11P	
		< LEAD >	
* LP901	1-690-880-11	LEAD (WITH CONNECTOR)	
		< VARIABLE RESISTOR >	
VR901	1-241-917-11	RES, VAR, CARBON 10K/10K/10K (LINE OUT)	
**********			
		MISCELLANEOUS **********	
⚠11	1-590-836-11	CORD, POWER	
62	1-769-401-11	WIRE (FLAT TYPE) (11 CORE)	
63	1-769-402-11	WIRE (FLAT TYPE) (19 CORE)	
⚠T301	1-427-815-11	TRANSFORMER, POWER	
**********			

Ref. No.	Part No.	Description	Remark
		ACCESSORIES & PACKING MATERIALS **********	
	1-473-055-11	REMOTE COMMANDER (RM-D300C)	
	1-558-271-11	CORD, CONNECTION (AUDIO 108cm)	
	1-769-403-11	CORD, CONNECTION (DIA. 3.5)	(SYSTEM 110cm)
	3-798-056-21	MANUAL, INSTRUCTION (ENGLISH)	
	3-943-535-01	COVER, BATTERY (For RM-D300C)	
	4-960-546-01	DIAL, JOG (For RM-D300C)	
	4-960-547-01	BUTTON (JOG DIAL) (For RM-D300C)	
*	4-972-963-01	CUSHION	
*	4-972-964-01	INDIVIDUAL CARTON	
**********			
		********** HARDWARE LIST **********	
#1	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S	
#2	7-682-548-04	SCREW +BVTT 3X8 (S)	
#3	7-682-548-09	SCREW +BVTT 3X8 (S)	

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9-959-982-11

Sony Corporation
Consumer A&V Products Company
Home A&V Products Div.

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